

Southern limit.			Eastern limit.		
Date.	Lat. N.	Lon. W.	Date.	Lat. N.	Lon. W.
February, 1883	42 01	52 46	February, 1883	46 19	45 44
February, 1884	42 00	50 00	February, 1884	46 50	43 45
February, 1885	41 50	51 10	February, 1885	47 52	42 00
February, 1886	46 10	47 15	February, 1886	48 00	44 47

Icebergs and field-ice were reported as follows:

14th.—S. S. "Surrey" passed through heavy field-ice and observed three large icebergs in N. 46° 32', W. 47° 2'. S. S. "Castor," in N. 47° 16', W. 46° 16', encountered a large field of ice through which it passed for fourteen hours; the ice was very heavy, being from twelve to fourteen inches thick; steered to the south for eighty miles to clear it.

15th.—S. S. "Palestine," in N. 46° 30', W. 46° 45', passed a quantity of field-ice from four to five miles long.

The s. s. "Kehrwieder," at Halifax, February 17th, reported having passed a large field of ice in N. 46° 10', W. 47° 40', about thirty miles long, extending southwest to northeast.

16th.—Captain Arthur Lewis, of the s. s. "City of Richmond," encountered field-ice in N. 46° 15', W. 46° 50', of which he reports as follows: "3.30 a. m., temperature of the air, 36°; temperature of the water, 42°. 4 a. m., air temperature, 32°; water temperature, 34°. 4.13 a. m., fell in with field-ice, some of it very close; steered southwest about twenty miles to clear it."

18th.—S. S. "Lero" met large fields of floating ice and passed an iceberg in N. 48°, W. 44° 47'. S. S. "Ethiopia," in N. 47° 10', W. 46° 30', passed a berg and a large quantity of field-ice.

20th.—S. S. "British Crown," in N. 46° 25', W. 46° 30', observed two medium sized icebergs, and in N. 46° 21', W. 46° 45', passed twenty miles of field-ice steering southwest.

28th.—S. S. "Polaria" passed an iceberg in N. 46° 10', W. 47° 15'. S. S. "Vancouver," at Halifax, February 28th, reported a large quantity of thick field-ice in N. 47°, W. 48°; steamed south to get clear of it.

TEMPERATURE OF THE AIR.

[Expressed in degrees, Fahrenheit.]

The distribution of mean temperature over the United States and Canada for February, 1886, is exhibited on chart ii by the dotted isothermal lines; and in the tables of miscellaneous data are given the monthly mean temperatures, with the departures from the normal, for the various stations of the Signal Service.

Over the country to the eastward of the one-hundredth meridian, except in the Canadian Maritime Provinces, the mean temperatures are below the normal, the departures being most marked from the Ohio River southward to the Gulf and south Atlantic coasts, where they range from 4° to 7°. In the Canadian Maritime Provinces, and over the country to the westward to the meridian above mentioned, the mean temperatures are above the normal; the departures are slight over the Maritime Provinces, but in the Rocky Mountain region they range from about 3° in the southern plateau to from 10° to 16° in Montana. Along the Pacific coast the mean temperature averaged about 4° above the normal.

The following are some of the most marked departures from the normal:

Above normal.		Below normal.	
Fort Assinaboine, Montana.....	16.1	Nashville, Tennessee.....	7.5
Fort Maginnis, Montana.....	15.2	Cedar Keys, Florida.....	7.1
Fort Shaw, Montana.....	14.5	Cincinnati, Ohio.....	7.0
Fort Benton, Montana.....	14.1	Chattanooga, Tennessee.....	6.5
Helena, Montana.....	13.1	Louisville, Kentucky.....	5.9
Spokane Falls, Washington Territory..	10.9	Pensacola, Florida.....	5.9
Fort Custer, Montana.....	9.3	Cape Henry, Virginia.....	5.9
Fort Buford, Dakota.....	8.8	Kitty Hawk, North Carolina.....	5.7

DEVIATIONS FROM NORMAL TEMPERATURES.

In the table below are given, for certain stations, as reported by voluntary observers, the normal temperatures for February for a series of years, the mean temperature for February, 1886, and the departures from the normal:

Station.	County.	Normal temperature for February.	Number of years.	Mean temperature for Feb., 1886.	Departure.
<i>Arkansas.</i>		0		0	0
Lead Hill.....	Boone.....	39.4	4	36.2	- 3.2
<i>California.</i>					
Princeton.....	Colusa.....	50.5	14	53.8	+ 3.3
Sacramento.....	Sacramento.....	48.9	20	53.0	+ 4.1
<i>Connecticut.</i>					
Middletown.....	Middlesex.....	26.8	28	24.9	- 1.9
<i>Dakota.</i>					
Webster.....	Day.....	6.0	3	18.1	+12.1
<i>Illinois.</i>					
Anna.....	Union.....	38.1	11	33.8	- 4.3
Mattoon.....	Colex.....	31.5	6	30.0	- 1.5
Peoria.....	Peoria.....	29.2	30	29.2	0.0
Riley.....	McHenry.....	22.0	25	19.9	- 2.1
Swanwick.....	Perry.....	33.0	4	29.8	- 3.2
Sycamore.....	De Kalb.....	21.6	4	21.2	- 0.4
<i>Indiana.</i>					
Lafayette.....	Tippecanoe.....	27.8	7	26.2	- 1.6
Mauzy.....	Rush.....	23.5	6	23.0	- 0.5
Spiceland.....	Henry.....	29.5	32	26.7	- 2.8
Vevay.....	Switzerland.....	35.9	21	30.6	- 5.3
<i>Iowa.</i>					
Cresco.....	Howard.....	17.8	10	14.2	- 3.6
Monticello.....	Jones.....	21.8	32	19.8	- 2.0
<i>Kansas.</i>					
Independence.....	Montgomery.....	35.0	14	33.5	- 1.5
Wollington.....	Sumner.....	32.0	8	32.0	0.0
Yates Centre.....	Woodson.....	29.3	6	31.0	+ 1.7
<i>Maine.</i>					
Bridgeton.....	Cumberland.....	21.0	11	17.5	- 3.5
Belfast.....	Waldo.....	22.3	27	20.1	- 2.2
Cornish.....	York.....	21.6	29	18.9	- 2.7
Gardiner.....	Kennebec.....	20.6	50	20.6	0.0
Orono.....	Penobscot.....	19.0	18	18.3	- 0.7
<i>Maryland.</i>					
Fallston.....	Harford.....	32.1	15	29.7	- 2.4
<i>Massachusetts.</i>					
Amherst.....	Hampshire.....	24.7	49	24.4	- 0.3
Cambridge.....	Middlesex.....	26.1	64	25.6	- 0.5
Fitchburg.....	Worcester.....	24.1	30	22.1	- 2.0
Lowell.....	Middlesex.....	26.5	10	24.0	- 2.5
New Bedford.....	Bristol.....	28.9	74	26.7	- 2.2
Somerset.....	Bristol.....	27.4	16	27.2	- 0.2
Springfield.....	Hampden.....	25.6	19	25.0	- 0.6
Taunton.....	Bristol.....	28.5	16	27.3	- 1.2
Williamstown.....	Berkshire.....	22.5	34	21.1	- 1.4
Worcester.....	Worcester.....	26.3	47	22.2	- 4.1
<i>Nevada.</i>					
Carson City.....	Ormsby.....	33.7	7	42.2	+ 8.5
<i>New Brunswick.</i>					
Saint John.....	Saint John.....	20.9	26	19.8	- 1.1
<i>New Hampshire.</i>					
Concord.....	Merrimac.....	24.4	18	23.1	- 1.3
Hanover.....	Grafton.....	19.0	22	17.5	- 1.5
<i>New York.</i>					
Factoryville.....	Tioga.....	22.6	4	20.3	- 2.3
Palermo.....	Oswego.....	21.5	32	19.6	- 1.9
Plattsburg Barracks.....	Clinton.....	17.9	17	15.5	- 2.4
North Volney.....	Oswego.....	22.0	18	20.7	- 1.3
<i>North Carolina.</i>					
Raleigh.....	Wake.....	47.7	3	39.0	- 8.7
<i>Ohio.</i>					
Wauseon.....	Fulton.....	25.5	16	25.0	- 0.5
<i>Pennsylvania.</i>					
Dyberry.....	Wayne.....	22.5	22	21.5	- 1.0
<i>Rhode Island.</i>					
Providence.....	Providence.....	27.5	52	27.0	- 0.5
<i>South Carolina.</i>					
Stateburg.....	Sumpter.....	50.5	6	44.7	- 5.8
<i>Texas.</i>					
New Ulm.....	Austin.....	56.2	14	54.2	- 2.0
<i>Vermont.</i>					
Lunenburg.....	Essex.....	17.3	38	15.4	- 1.9
Newport.....	Orleans.....	17.9	11	14.0	- 3.9
Stratford.....	Orange.....	18.9	11	16.4	- 2.5
<i>Virginia.</i>					
Bird's Nest.....	Northampton.....	41.9	18	35.6	- 6.3
Dale Enterprise.....	Rockingham.....	32.9	6	32.7	- 0.2
Variety Hills.....	Nelson.....	39.1	9	32.6	- 6.5
Wytheville.....	Wythe.....	37.0	22	33.3	- 3.7
<i>West Virginia.</i>					
Helvetia.....	Randolph.....	34.9	10	29.0	- 5.9

* From the "Bulletin of the New England Meteorological Society."

The following notes on the temperature for February, and the winter months of 1885-'86, are given by voluntary observers:

Arkansas.—Lead Hill, Boone county: the mean temperature for the winter of 1885-'86 is 2°.8 below the average for the past four years.

Illinois.—Riley, McHenry county: the mean temperature for the winter of 1885-'86, 18°.5, is 2°.2 below the mean for the past twenty-three winters.

Indiana.—Spiceland, Henry county: the mean temperature for the winter of 1885-'86, 26°.5, is 1°.6 below the mean of the past thirty-two winters.

Vevay, Switzerland county: the maximum temperature that has occurred in any February for the past twenty-one years was 75°.0, in 1885, and the minimum, -10°.0, in 1867.

Iowa.—Monticello, Jones county: the maximum temperature that has occurred in any February during the past thirty-two years was 60°, in 1877, and the minimum, -32°, in 1876; the mean temperature for the winter of 1885-'86, 17°.4, is 2°.5 below the average.

Kansas.—Yates Centre, Woodson county: the temperature for the winter of 1885-'86, 26°.4, is 0°.6 below the mean for the past six years.

Maryland.—Fallston, Harford county: the maximum temperature that has occurred in any February for the past fifteen years was 37°.8, in 1880, and the minimum, 23°.7, in 1876.

Massachusetts.—Worcester, Worcester county: the maximum temperature for February was 48°.0, and the minimum, -9°.0, the extremes in February for a period of forty-eight years being 70°, in 1878, and -11°.2, in 1855.

New York.—Palermo, Oswego county: the mean temperature for the winter months of 1885-'86 was 20°.2, or 1°.4 below the average for the past thirty-three years.

North Volney, Oswego county: the highest mean temperature that has occurred in any February for the past eighteen years was 28°.4, in 1882, and the lowest, 12°.4, in 1885; the mean temperature for the winter of 1885-'86 was 22°.1, the average for eighteen winters being 17°.8; the highest winter mean for the same period was 28°.7, in 1879-'80, and the lowest, 17°.8, in 1874-'75.

Ohio.—Wauseon, Fulton county: the highest February mean temperature for a period of sixteen years was 36°.4, in 1882, and the lowest, 11°.3, in 1875, the extremes during this time were 62°.7, in 1880, and -24°.3, in 1885; the mean temperature for the past winter was 24°.1, or 1°.0 below the normal; the warmest winter was that of 1879-'80, when the mean was 33°.0, and the coldest occurred in 1874-'75, the mean being 17°.2.

Pennsylvania.—Dyberry, Wayne county: the maximum temperature that has occurred in any February for the past twenty-seven years was 59°.0, in 1880, and minimum, -28.0, in 1868.

Texas.—New Ulm, Austin county: the highest February mean temperature for a period of fourteen years was 62°.1, in 1882, and the lowest, 52°.6, in 1883, the extremes during this period being 88°.0 and 16°.0, both in 1883; the mean temperature of the winter of 1885-'86 was 50°.7.

Virginia.—Variety Mills, Nelson county: the highest February mean temperature for the past nine years was 43°.4, in 1884, and the lowest, 29°.6, in 1885; the minimum temperature for February, 1886, was -15°.6, being within 0°.4 of the lowest temperature recorded at this station during the past eleven years, viz., -16°.0, on December 31, 1880. The mean temperature for the winter of 1885-'86 was 32°.9, or 4°.0 below the average for nine years, and is the same as the lowest winter mean during that time, which occurred in 1880-'81; the highest winter mean was 43°.5, in 1879-'80.

Wytheville, Wythe county: the maximum temperature for February, 1886, 62°.0, is 1°.2 below the mean of the maximum temperatures for the past twenty-two years; the minimum for February, 1886, -7°.0, is 14°.8 below the mean of the minimum temperatures for the same period.

In the following table are given the mean temperatures for the several geographical districts, with the normals and departures, as deduced from Signal Service observations:

Average temperatures for February.

Districts.	Average for Feb. Signal-Service ob- servations.		Comparison of Feb., 1886, with the average for several years.
	For sev- eral years.	For 1886.	
	°	°	°
New England.....	27.3	24.8	- 2.5
Middle Atlantic States.....	35.6	31.4	- 4.2
South Atlantic States.....	49.8	44.5	- 5.3
Florida Peninsula.....	63.2	57.7	- 5.5
Eastern Gulf States.....	52.6	47.2	- 5.4
Western Gulf States.....	52.2	49.4	- 2.8
Rio Grande Valley.....	62.1	61.5	- 0.6
Tennessee.....	43.8	37.8	- 6.0
Ohio Valley.....	35.6	30.6	- 5.0
Lower Lake region.....	27.0	24.6	- 2.4
Upper Lake region.....	27.0	18.7	- 8.3
Extreme Northwest.....	8.2	11.6	+ 3.4
Upper Mississippi Valley.....	28.0	26.0	- 2.0
Missouri Valley.....	22.5	24.0	+ 1.5
Northern slope.....	21.2	32.5	+ 11.3
Middle slope.....	30.5	36.8	+ 6.3
Southern slope.....	46.3	46.1	- 0.2
Southern plateau.....	45.0	48.3	+ 3.3
Middle plateau.....	33.5	40.0	+ 6.5
Northern plateau.....			
North Pacific coast region.....	40.9	44.5	+ 3.6
Middle Pacific coast region.....	49.2	53.5	+ 4.3
South Pacific coast region.....	55.8	60.2	+ 4.4

RANGES OF TEMPERATURE.

The monthly, and the greatest and least monthly ranges of temperature, are given in the tables of miscellaneous meteorological data.

The monthly ranges were greatest in the extreme northwest, northern slope, and upper Missouri valley, where they generally varied from 80° to 90°; they were least in Florida and along the Pacific coast.

The following are some of the greatest and least monthly ranges:

Greatest.		Least.	
	o	o	
Yankton, Dakota.....	90.4	Tatoosh Island, Washington Territory.....	20.2
Moorhead, Minnesota.....	87.7	Fort Canby, Washington Territory.....	21.9
Fort Shaw, Montana.....	87.2	Pysht, Washington Territory.....	27.0
Huron, Dakota.....	86.7	Astoria, Oregon.....	27.0
Valentine, Nebraska.....	85.7	Key West, Florida.....	30.0
Saint Vincent, Minnesota.....	85.3	San Francisco, California.....	30.0
Omaha, Nebraska.....	83.7	Portland, Oregon.....	34.0
Fort Totten, Dakota.....	83.4	Sacramento, California.....	34.7

LOW TEMPERATURES

New Haven, Connecticut: the temperature fell to 7°.7 below zero on the 5th, being the lowest recorded this winter.

Saint Albans, Franklin county, Vermont: at 7 a. m. of the 5th the temperature was 24° below zero; at Saint Albans Bay 28° below, and at East Berkshire, this county, it was reported 40° below.

Albany, New York: a minimum temperature of -10°.7 was recorded on the morning of the 5th, being the coldest this winter; owing to the extreme cold weather, ice-men were compelled to suspend work, and other out-door operations were greatly interrupted.

New York City: the minimum temperature, 1°.8 below zero, that occurred on the morning of the 5th was the lowest temperature recorded at this station since December 31, 1880; in more exposed parts of the city the temperature is said to have been 5° to 10° below zero. Much suffering was caused by the intense cold, and many persons were badly frost-bitten.

Saratoga, Saratoga county, New York: a cold wave swept over this place during the night of the 5th, the temperature falling to 36° below zero.

Philadelphia, Pennsylvania: the mean temperature for the 5th was 6°.0, the minimum being 2°.4 below zero, which was the coldest since the establishment of this station.

Shenandoah, Schuylkill county, Pennsylvania: the 5th was the coldest day ever experienced in this locality. The thermometer in the morning registered from 10° to 16° below zero. Work was suspended at several of the collieries owing to the intense cold, and the public schools were dismissed.

Baltimore, Maryland: the temperature fell to 1°.1 below zero on the 5th, being the lowest since January 1, 1881.

Washington City: the morning of the 5th was the coldest of the season, the minimum thermometer recording 2°.3 below zero.

Norfolk, Virginia: the temperature at 7 a. m. of the 5th was 3°.5, the lowest reading that has been recorded since the establishment of this station, and from other reports, the coldest experienced since 1857.

Bird's Nest, Northampton county: the temperature at 7 a. m. of the 5th was 2°.0, being 4°.0 lower than at any time during the past eighteen years.

Cape Henry, Virginia: the temperature fell rapidly during the night, and on the morning of the 5th reached a minimum of 5°.4, which was the lowest that has been observed for several years.

Chincoteague, Virginia: on the morning of the 5th the minimum thermometer recorded 2°.4, being the coldest experienced on this island since 1857.

Richmond, Henrico county, Virginia: the weather on the 4-5th was the coldest experienced since December 30, 1880, the thermometer recording from 4° to 8° below zero. Reports from other parts of the state showed a similar condition, the temperature in some cases ranging from 16° to 20° below zero.

Staunton, Augusta county, Virginia: at 6.30 a. m. of the 5th the thermometer registered 25° below zero, being the coldest weather ever experienced at this place.

Kitty Hawk, North Carolina: the lowest temperature that has been recorded since the establishment of this station occurred on the morning of the 5th, the thermometer registering 5° 4.

Buffalo, New York: the minimum thermometer recorded 12° 1 below zero on the morning of the 5th; it was the coldest day of the season.

Nashville, Tennessee: on the morning of the 5th a minimum temperature of -6° 6 was recorded, it being the lowest ever observed at this station in February. Mr. E. D. Hicks, who resides thirteen miles southwest of this city, reported a temperature of -13° 0, his thermometer being perfectly accurate.

Cedar Keys, Florida: on the morning of the 5th the temperature fell to 26° 5, which was very low for this season of the year in this state; ice formed one-quarter of an inch thick on the salt water bayous; some damage was reported to early vegetation.

Table of comparative maximum and minimum temperatures for February.

State or Territory.	Station.	For 1886.		Since establishment of station.			
		Max.	Min.	Max.	Year.	Min.	Year.
Alabama	Mobile	70.7	19.3	78.0	1883	27.6	1885
Do	Montgomery	73.0	14.4	81.2	1883	15.5	1885
Arizona	Prescott	70.4	18.6	80.0	1879	11.0	1880
Do	Fort Apache	71.0	14.5	74.0	1881	9.0	1880
Arkansas	Fort Smith	69.0	1.9	78.4	1883	1.0	1885
Do	Little Rock	72.8	7.6	77.0	1882	10.0	1885
California	San Francisco	71.0	41.0	71.0	1884	35.0	1883, 1884
Do	San Diego	80.3	44.2	82.6	1883	35.0	1880
Colorado	Denver	71.0	2.9	72.0	1879	22.0	1883
Do	Pike's Peak	26.6	-19.3	29.0	1876	-37.0	1875
Connecticut	New Haven	51.2	-7.7	65.0	1880	-3.0	1874
Do	New London	50.5	-4.2	62.0	1880	-6.0	1871
Dakota	Fort Buford	51.2	-20.0	57.0	1882	-40.0	1883, 1884
Do	Yankton	65.6	-24.8	68.0	1876	-23.1	1884
Delaware	Cape Henlopen	44.6	15.1				
Do	Del. Breakwater			66.0	1880	7.0	1881
District of Columbia	Washington City	67.5	-2.3	78.0	1874	-1.5	1875
Florida	Jacksonville	72.6	24.3	83.0	1876, 1883	32.0	1875, 1878
Do	Key West	62.3	52.3	87.0	1874	55.0	'72, '77, '78
Georgia	Atlanta	65.3	8.4	74.5	1883	8.0	1885
Do	Savannah	70.3	19.0	80.0	'76, '80, '83	22.5	1885
Idaho	Boise City			64.0	1879	-8.5	1884
Do	Lewiston			63.0	1881	-17.8	1884
Illinois	Chicgo	60.2	-2.6	74.0	1883	-0.6	1885
Do	Chicago	55.6	-6.3	63.0	1876, 1880	-13.7	1885
Indiana	Indianapolis	54.5	-4.2	72.0	1883	-9.0	1885
Indian Territory	Fort Sill	75.0	5.0	79.0	1879, 1880	6.0	1885
Iowa	Dubuque	48.0	-21.2	67.2	1882	-31.0	1875
Do	Keokuk	56.3	-17.7	68.0	1876	-14.5	1885
Kansas	Dodge City	66.0	-2.4	78.0	1876	-20.0	1883
Do	Leavenworth	61.5	-10.0	73.0	1876	-16.2	1885
Kentucky	Louisville	61.0	-0.2	77.5	1883	-1.3	1885
Louisiana	New Orleans	74.0	25.0	80.0	1883	30.0	1885
Do	Shreveport	77.2	19.8	80.5	1876	14.6	1885
Maine	Eastport	48.6	-14.0	47.0	1874, 1878	-20.0	1876
Do	Portland	51.5	-10.2	58.0	1880	-7.0	1874, 1875
Maryland	Baltimore	66.9	-1.1	78.0	1874	-2.0	1873
Massachusetts	Boston	57.3	-6.6	64.0	1880	-6.5	1876
Michigan	Detroit	54.1	-2.6	64.3	1884	-20.0	1875
Do	Marquette	50.5	-14.4	69.0	1877	-27.0	1875
Minnesota	Duluth	55.4	-25.0	57.0	1877	-32.3	1885
Do	Saint Paul	49.0	-28.1	59.0	1880	-32.0	1875
Mississippi	Vicksburg	74.9	16.0	83.1	1883	17.2	1885
Missouri	Saint Louis	63.6	-7.9	73.2	1882	-5.5	1885
Montana	Fort Benton	69.1	-11.0	62.0	1882	-41.0	1883
Do	Helena	62.1	-12.6	60.0	1881	-32.0	1883
Nebraska	North Platte	61.0	5.0	68.3	1882	-29.0	1883
Do	Omaha	64.3	-19.4	66.0	1880	-24.9	1883
Nevada	Winnemucca	67.3	11.0	69.0	1879	-17.0	1882
New Hampshire	Mount Washington	41.0	-39.2	43.0	1883	-42.0	1876
New Jersey	Atlantic City	50.3	-2.3	71.0	1880	-5.0	1875
Do	Sandy Hook	53.5	-2.2	71.0	1874	-1.5	1885
New Mexico	Santa Fé	56.0	9.0	75.0	1879	-3.0	1875
New York	Buffalo	55.8	-12.1	63.8	1883	-13.0	1875
Do	New York City	55.8	-1.8	69.0	1874	-4.0	1873
North Carolina	Charlotte	68.0	5.9	76.5	1883	12.0	1885
Do	Wilmington			81.0	1884	15.0	1875
Ohio	Cincinnati	62.9	-0.8	73.0	1883	9.6	1885
Do	Toledo	58.2	8.1	65.0	1883	-15.5	1885
Oregon	Portland	65.0	31.0	64.7	1882	7.0	1883
Do	Roseburg	72.1	30.9	68.7	1883	9.4	1883
Pennsylvania	Philadelphia	65.6	-2.4	75.0	1874	-1.0	1875, 1881
Do	Pittsburg	62.7	-3.0	76.5	1882	-10.0	1875
Rhode Island	Block Island	52.0	-1.0				
Do	Newport			56.0	1880	-2.0	1881
South Carolina	Charleston	72.3	13.3	78.0	1876, 1880, 1882, 1883	22.0	1885
Tennessee	Knoxville	66.0	-4.1	79.0	1871	1.0	1885
Do	Nashville	61.5	-6.6	77.4	1883	-0.8	1885
Texas	Fort Davis	76.3	18.0	79.0	1879	9.0	1883
Do	Galveston	71.0	-31.6	75.0	1882, 1884	23.0	1885
Utah	Salt Lake City	63.2	19.8	68.0	1879	0.0	1885
Virginia	Lynchburg	65.2	1.3	75.0	1874	3.0	1875
Do	Norfolk	70.8	3.5	81.0	1871	9.0	1875
Washington Ter.	Dayton			60.0	1875	-24.0	1883
Do	Olympia	61.0	25.8	59.1	1884	2.0	1884
Wisconsin	La Crosse	52.0	-23.0	65.0	1882	-31.0	1875
Do	Milwaukee	43.9	-15.6	60.0	1872	-23.6	1885
Wyoming	Cheyenne	63.2	9.2	59.0	'79, '80, '81	-28.2	1874

FROSTS.

Frosts occurred in the various districts on the following dates:

New England.—1st to 28th.

Middle Atlantic states.—1st to 28th.

South Atlantic states.—1st to 10th, 13th to 28th.

Florida.—Sanford, 6th, 14th; Cedar Keys, 5th, 6th; Archer, 2d, 6th to 9th, 13th, 14th; Limona, 5th, 6th, 13th.

East Gulf states.—1st, 2d, 4th to 8th, 12th, 13th, 16th, 17th, 18th, 20th to 23d, 26th.

West Gulf states.—1st to 5th, 7th, 8th, 10th to 13th, 16th, 17th, 18th, 20th, 21st, 22d, 26th.

Tennessee.—1st to 9th, 13th, 15th to 22d, 24th, 26th, 27th.

Ohio Valley.—1st to 11th, 13th to 28th.

Lower lake region.—1st to 28th.

Upper lake region.—1st to 28th.

Extreme northwest.—1st to 28th.

Upper Mississippi valley.—1st to 28th.

Missouri Valley.—1st to 28th.

Northern slope.—1st to 28th.

Middle slope.—1st to 28th.

Southern slope.—1st to 8th, 10th, 11th, 12th, 14th to 28th.

Southern plateau.—1st to 21st, 23d, 25th.

Middle plateau.—1st to 28th.

Northern plateau.—3d, 4th, 6th to 9th, 13th to 21st, 24th, 26th, 27th, 28th.

North Pacific coast region.—1st, 7th, 8th, 14th, 17th to 22d, 24th to 28th.

Middle Pacific coast region.—1st to 22d, 27th, 28th.

South Pacific coast region.—Murietta, California, 5th.

ICE.

Ice formed in the southern part of the country, as follows:

Alabama.—Greensborough, 4th, 5th, 6th, 16th, 20th; Birmingham, 4th, 5th, 6th.

Arkansas.—Little Rock, 3d to 6th, 15th, 17th, 20th.

Florida.—Cedar Keys, 5th; Pensacola, 4th, 5th.

Georgia.—Athens, 1st to 8th, 16th to 21st, 27th; Quitman, 5th, 6th, ice formed on eleven nights, and as late as the 27th.

Louisiana.—New Orleans, 4th, 5th, 6th.

North Carolina.—Fort Macon, 4th, 5th, 6th; Hatteras, 6th; Wash Woods, 3d; Kitty Hawk, 5th.

Texas.—Galveston, 4th.

PRECIPITATION.

[Expressed in inches and hundredths.]

In the following table are shown, for the several geographical districts, the normal February precipitation for a series of years; the average for February, 1886, and the excess or deficiency as compared with the normal:

Average precipitation for February.

Districts.	Average for February, Signal-Service observations.		Comparison of Feb., 1886, with the average for several years.
	For several years.	For 1886.	
	Inches.	Inches.	Inches.
New England	4.07	7.48	+3.41
Middle Atlantic States	3.70	4.76	+1.06
South Atlantic States	3.98	2.35	-1.63
Florida Peninsula	3.00	1.09	-1.91
Eastern Gulf States	4.94	2.88	-2.06
Western Gulf States	4.21	3.45	-0.76
Rio Grande Valley	1.42	2.02	+0.60
Tennessee	5.24	4.04	-1.20
Ohio Valley	3.84	1.72	-2.12
Lower lake region	2.62	2.14	-0.48
Upper lake region	2.07	1.87	-0.20
Extreme northwest	0.75	0.82	+0.07
Upper Mississippi Valley	2.30	1.33	-0.97
Missouri Valley	0.90	0.42	-0.48
Northern slope	0.58	0.88	+0.30
Middle slope	0.57	0.75	+0.18
Southern slope	0.93	0.37	-0.56
Southern plateau	1.34	1.20	-0.14
Middle plateau	1.20	0.88	-0.32
North Pacific coast region	7.12	3.60	-3.52
Middle Pacific coast region	3.35	0.52	-2.83
South Pacific coast region	2.26	1.00	-1.26